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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,323	08/26/2002	Magnus Carlsson	GKS CASE 375	2884

7590 10/21/2003
Flynn Thiel Boutell & Tanis
2026 Rambling Road
Kalamazoo, MI 49008-1699

EXAMINER

HAUGLAND, SCOTT J

ART UNIT	PAPER NUMBER
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3654

DATE MAILED: 10/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/070,323

Applicant(s)

CARLSSON ET AL.

Examiner

Scott Haugland

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-40 is/are pending in the application.
- 4a) Of the above claim(s) 25 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23,24,26-32 and 34-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claims 25 and 33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 9.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 23, 24, 26-31, 35-40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 23, 24, and 26-31 are purported to recite a method for controlling a yarn processing system, but no method steps are recited.

In claim 35, line 6, "the drive motor" lacks sufficient antecedent basis.

In claim 36, line 7, "said minimum size yarn sensor" lacks sufficient antecedent basis.

The language "preferably ..." in claim 38, lines 6-7 is indefinite since it is not clear whether or not the structure following "preferably" is required.

In claim 39, line 2, "said run signal" lacks sufficient antecedent basis.

The language "without a galvanic connection" in claim 39, lines 3-4 and claim 40, lines 3-4 appears inaccurate since an electrical connection is disclosed between the pick-up head P and the control means C.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23, 24, 26-32, and 34-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colonel (European patent document No. EP 0 863 236 A1) in view of Robertson (U.S. Patent No. 3,164,333).

Colonel discloses a yarn processing system comprising a yarn consuming textile machine (loom; col. 2, lines 36-37), a yarn feeding device 1 upstream of the textile machine, and a supply spool 15 upstream of the yarn feeding device 1. The yarn feeding device pulls yarn off of the supply spool with varying speed and maintains an intermediate store of yarn which covers consumption demand of the textile machine (col. 2, lines 32-37; col. 3, line 58 - col. 4, line 5). Resistance to feeding of the yarn to the yarn feeding device is provided by braking device 19. A winding drive of the yarn feeding device includes motor 4. Motor 4 of the yarn feeding device is controlled by signals from sensor 20, 22 that monitors the quantity of yarn in the yarn feeding device (col. 4, lines 38-43).

Colonel does not disclose that the rotational resistance of the supply spool is actively regulated.

Robertson teaches providing an apparatus for supplying a strand to a utilization device with means including brake 14 and associated controls for actively regulating the rotational resistance of a strand supply spool 10. The brake is activated by a pneumatic cylinder 20 (note air supply in Fig. 1).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the yarn feeding apparatus of Colonel with means for actively regulating the rotational resistance of the supply spool as taught by Robertson to provide improved control over the

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tension in the strand removed from the supply spool including reducing overrunning of the supply spool.

With regard to claim 26, active braking of the supply spool until it stops would inherently occur in the apparatus of Colonel as modified when the winding drive of the yarn feeding apparatus is switched off since the tension in the yarn would decrease and causing the brake to be applied.

With regard to claim 27, the braking action and resulting tension maintained thereby disclosed by Colonel and taught by Robertson would inherently contribute to the stopping of the winding drive of the yarn feeding apparatus.

With regard to claims 30 and 37, there would inherently be a delay in the increase in resistance or an increase in resistance along a ramp function in the modified apparatus of Colonel because of the inherent characteristics of the control system and brake taught by Robertson or any equivalent system.

With regard to claim 36, the braking device of the modified apparatus of Colonel would be disengaged when a minimum size signal causes the winding drive of the yarn feeding device to restart.

Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Colonel in view of Robertson as applied to claims 32 and 34-36 above, and further in view of Hellstroem (U.S. Patent No. 4,617,971).

Colonel does not disclose an external pick-up head for detecting a run or stop signal.

Hellstroem teaches providing a yarn feeding device with an external pick-up head 6-9 for detecting a stored quantity of yarn to detect run or stop signals for controlling a winding drive of the yarn feeding device.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the yarn processing system of Colonel with an external pick-up head as taught by Hellstroem to detect a run or stop signal for controlling the winding drive motor for the yarn feeding device to provide greater reliability of the sensor and reduce cost.

The run or stop signal of Colonel and of the apparatus of Colonel as modified is generated without counting.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Morohashi et al and Tholander are cited

to show yarn processing systems having means to provide resistance to yarn motion upstream of a yarn feeding device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Scott Haugland whose telephone number is (703) 305-6498. The examiner can normally be reached on Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kathy Matecki can be reached on (703) 308-2688. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

~~4971~~
sjh
10/16/03

Kathy Matecki

KATHY MATECKI
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